



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,465	03/13/2006	Muthuvetpillai Jegatheeson	4506-1036	5024
<div>465 7590 01/18/2008</div> <div>YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202</div>				
EXAMINER				
WRIGHT, DIRK				
ART UNIT		PAPER NUMBER		
3681				
MAIL DATE		DELIVERY MODE		
01/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/534,465

Applicant(s)JEGATHEESON,
MUTHUVETPILLAI**Examiner**

Dirk Wright

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-12 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,13,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Klecker '965. Klecker shows a one way clutch with axially facing pawls and pockets, where the number of pawls is different then the number of pockets, in this case 6 pawls and 10 pockets, and they are arranged such that 2 pawls are engaged at the same time where the 2 pawls are on opposite sides of the axis of rotation in order to evenly distribute the load through the clutch.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Andersen '174. Andersen shows a one way clutch 11, 13 in a gear train such that movement in one direction has positive efficiency and movement in the opposite direction has negative efficiency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen '174 in view of Klecker '965. Andersen does not show a reversible one way clutch, whereas Klecker shows such a device. It would have been obvious to one of ordinary skill in this art to use the Klecker device in the transmission of Andersen because it would have added functionality to the

transmission, it would have been obvious to try a different one way clutch in the Andersen transmission and the addition of the Klecker device would not require substantial alteration of either one.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the claim, “the controllable amount of backlash” lacks an antecedent.

Allowable Subject Matter

Claims 3, 4, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-12 and 17-19 are allowed.

The following is an examiner’s statement of reasons for allowance: The prior art does not anticipate nor render obvious the claimed invention of:

A one-way clutch for providing coupling between a first rotatable shaft having an axis of rotation, and a second, abutting, rotatable shaft having a co-axial axis of rotation, capable of coupling the shafts if the first shaft is rotated in an engaging direction relative to the second shaft but of uncoupling the shafts if the first shaft is rotated in a opposite, coasting direction relative to the second object, and in which a plurality of pawl members each having an axis of rotation, a first engaging face, and a second engaging face the faces being separated by a substantially rigid

rod, are disposed about a first plate or annulus in a position wherein each may reversibly engage from time to time with a corresponding pocket disposed about a second plate or annulus in order to provide coupling, characterised in that a directionally dependent biasing means is applied to the or each pawl member of the one-way clutch, so that in use the or each member is biased to extend towards a corresponding pocket when the relative movement of the first and second rings of the one-way clutch occurs in the engaging direction, and is biased to retract away from a corresponding pocket when movement is in the coasting direction.

No particular single feature of the claim renders the claim as a whole patentable. Only the claim taken as a whole combination is deemed new and unobvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dirk Wright whose telephone number is 571-272-7098. The examiner can normally be reached on Monday through Friday, 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dirk Wright/
Primary Examiner
Art Unit 3681

DW
Thursday, January 17, 2008